

**ADAPTIVE MODULATION AND CODING****ABSTRACT**

An adaptive modulation and coding method comprises selecting (S7) one of a plurality of different  
5 available modulation and coding levels to apply to a signal transmitted from a transmitter to a receiver. The selection is based on a comparison between a signal transmission quality ( $\hat{I}_{or}/I_{oc}$ ) and one or more threshold values. The or each threshold value is adjusted (S5,  
10 S6) when the signal transmission quality is within a predetermined range of that threshold value, and is maintained unchanged (S3) when the signal transmission quality is outside that range.

By maintaining the threshold value unchanged when  
15 the signal transmission quality is outside the range of that value the adjustments to the threshold value(s) are limited, whilst still enabling the threshold value(s) to take account of prevailing signal transmission conditions. This leads to improved  
20 throughput performance, especially under path conditions involving a single dominant path.

[Fig. 8]